

NASA Briefs

Mars instrument launched on Japanese craft

A NASA instrument to measure the gas composition of the upper atmosphere of Mars and hardware to support a radio science experiment was launched July 3 on a Japanese spacecraft known as Planet-B. The Neutral Mass Spectrometer instrument and Ultra Stable Oscillator were launched aboard Planet-B from the Kagoshima Space Center on Kyushu Island, Japan. "The Neutral Mass Spectrometer will enable us to measure the chemical composition of the upper atmosphere of Mars on a global scale, which has never been done before," said Dr. Hasso Niemann, the NMS principal investigator at NASA's Goddard Space Flight Center's Laboratory for Atmospheres.

X-33 thermal systems tests complete

NASA's F-15B Aerodynamic Flight Facility aircraft has successfully completed flight testing of Thermal Protection System materials for the X-33 Advanced Technology Demonstrator at NASA's Dryden Flight Research Center. Six flights were flown to test the durability of the TPS materials at flight velocities above the speed of sound, providing data to the X-33 demonstrator program team. The X-33 is scheduled to begin test flights in July 1999. "This is an excellent example of all the testing the X-33 program is performing on the challenging technologies we need for a reusable launch vehicle," said Dan Dumbacher, NASA's X-33 deputy program manager. The F-15B reached an altitude of 36,000 feet and a top speed of Mach 1.4 during the flight series. No damage or signs of wear from high speed or maneuvering were apparent on any of the TPS materials, providing further confidence to the X-33 team in the ability of the materials to successfully protect the X-33 and follow-on vehicles in the harsh environment in which they will fly.

SOHO recovery efforts continue

Engineers are continuing efforts to re-establish contact with the NASA/European Space Agency Solar and Heliospheric Observatory spacecraft using NASA's Deep Space Network. Contact with SOHO was lost on June 24 during maintenance operations. A team of experts from ESA and Matra Marconi Space, prime contractor for the SOHO spacecraft, gathered at NASA's Goddard Space Flight Center, to assist the NASA Flight Operations Team in assessing the situation and analyzing the spacecraft status should contact be regained. The incident will be the subject of a joint ESA/NASA inquiry board.

Buckey helps passenger on airliner

Commercial airliners can be as stressful as an orbiting neurological laboratory. Just ask Jay Buckey. Buckey was returning to Houston from Indianapolis on a commercial airliner after a post-light appearance at the Indianapolis 500 and talks to local schools and companies. "I was kind of snoozing in one of the front bulkhead seats," said Buckey,

who flew as a payload specialist on the STS-90 Neurolab mission. The pilot asked on the public address system if there were a doctor on the plane when a man traveling with his son had become unresponsive. "It turns out he was a former race car driver who had taken insulin the night before and hadn't eaten," Buckey said. "Fortunately, he had a good heart rate

and blood pressure. Alex Dunlap (alternate STS-90 payload specialist), also a physician, was there." The man didn't need CPR or anything that heroic, Buckey said. "What he needed was some glucose." Unfortunately, he couldn't take any by mouth. Buckey and Dunlap got out the airliner's medical kit and began prepar-

ing a glucose injection. However, Buckey said, the patient by this time was doing better and the plane was on an emergency return approach to Indianapolis. "We handed off to EMTs and they got him off to the hospital," Buckey said. In the end, he said, it was no big deal. "We were just sort of there as moral support."



OVER THE NET — Joel Smith spikes the ball for a point in a mixed doubles match in the inaugural Gilruth Center Sand Volleyball Tournament, held June 26. Smith was part of a team that included players from Raytheon and Hernandez Engineering.

JSC Child Care teachers earn certificates

Teachers at the accredited JSC Child Care Center have completed an eight-week course earning Child Development Associate certificates. The certificates prepare them to earn a CDA Credential. The teachers also earned Continuing Education Units from Texas Southern University. The parent board of directors and JSC Child Care Center Director Kristy Hirling arranged for the teachers to participate in the course. The idea was to improve their performance in ways satisfying for the teachers and beneficial to the children at the child care center. The CDA course included classroom instruction, group activities and self-study assignments. One criterion used to measure the teachers' competency in the CDA curriculum was a Professional Resource File, developed in accordance with specific guidelines. Not only did the course promote quality child care, it encouraged personal growth. The course was taught by Cheryl Greene, of Went-R-Green Early Child Care Educators, a self described NASA "junkie". Dianna Reynolds, one of the teachers from the JSC Child Care Center said: "We learned to match our lesson plans to the age, growth and development level of the children we teach. We can then give them what they need to learn using developmentally appropriate practices." The JSC graduates are: Cindy Babineaux, Julie Becker, El Borinsky, Evelyn Coles, Nancy Coppedge, Yolanda Garza, Amanda Harris, Deana Layne, Sandra Layne, Dianna Reynolds, Shelly Schroeder, Jamie Talesky and Kristy Hirling.

Space Center Houston offers IMAX "best of best" this summer

This summer at Space Center Houston, guests are being treated to a world-class IMAX Film Extravaganza featuring the "best of the best" space films shown daily through Labor Day. Following are the five spectacular IMAX films showing this summer: "Blue Planet": Spectacular scenes from space, filmed aboard several space shuttle missions, are combined with scenes on the Earth's surface, clearly showing the powerful forces that affect the planet. Volcanoes, earthquakes and typhoons are depicted, but it is the signs of pollution, ozone depletion, deforestation

and energy consumption—as seen from space—that reveal the more disturbing human impact. "Destiny in Space": Viewers get an exciting glimpse into the future of space exploration. With amazing images of the space shuttle in orbit around the Earth as well as fly-overs of Mars and Venus, the film focuses on the partnership of humans and robots working in space. "The Dream is Alive": Shot by 14 astronauts, this film gives viewers an unprecedented window aboard the space shuttle. The film includes footage of launches and landings, satellite captures and repairs, space

walks, and an inside look at how the astronauts live in space. "Hail Columbia!": This film follows the first flight of the shuttle craft, highlighting its final preparation, the suspense of pre-launch, the thundering take-off, the flight, and the re-entry and landing. Also featured are revealing glimpses of the commander, veteran astronaut John Young; the pilot, Bob Crippen; and some of the many scientists, engineers and support personnel who made the success possible. "Mission to Mir": Filmed in space by the astronauts, this unprecedented 40-minute tour of Russia's

Space Station Mir gives viewers a unique look inside the weightless home in space that has been occupied by international teams of scientists since 1986. Blending historical footage with a live-action shots, the production illustrates the personal friendship forged by the former Cold War rivals as they begin working together in orbit. JSC civil service employees may visit Space Center Houston for free by displaying their NASA badges. Contractor employees will be charged admission, but will not be required to pay for parking. For more information, call 244-2100.

Station components to be joined for KSC tests

(Continued from Page 1) The multi-element testing plan was a late addition to the International Space Station Program that has capitalized on an opportunity presented by launch delays during the past year. Throughout the delays, due mainly to slowdowns in the construction of Russian contributions, U.S. station components have retained their original construction

schedules and their original delivery dates to Florida. With the new launch schedule, components for the first six launches will now all be at KSC simultaneously for several months, opening a window for the tests. To pull together the plan in time, a tremendous effort was put forth by a team at JSC, KSC and Boeing beginning in 1996, Arceneaux said. At JSC, the team was led by Tony

Gallina and Gerald Esquivel of the Station Vehicle Office and Rick White of Boeing. At KSC, team lead Cheryl McPhillips and Dale Strigberg headed an effort to develop the tests from the Space Station Hardware Integration Office. The success in putting together this first multi-element testing plan has led to a drive to formulate plans to continue such testing throughout the program, Arceneaux said.

"There are a lot of people who think that this is the best thing this program has done recently to strengthen itself," Arceneaux added. "Throughout assembly, we won't use this approach to test all of the interfaces, but we will certainly test the most critical ones. You are going to find every problem with your spacecraft eventually. "Our goal is to make sure we find them and fix them on the ground."

JSC employees, teams receive space agency's highest honors

(Continued from Page 1) Fountain, Elena M. Huffstetler, and Bobbie G. Swan. NASA Public Service Medal: Constable Bill Bailey, Harris County Constable's Office, Precinct 8; Roy L. Fox, Jr., Aerospace Recovery Services; Donald E. Gardner, Ph.D., Inhalation Toxicology Associates; Annette Marie Mules, International Space School Foundation; Thomas Geoffrey Mules, International Space School Foundation, and Gloria A. Salinas, Lockheed Martin Space Mission Systems & Services. NASA Group Achievement Award: AER-

Cam Sprint Development Team, Composite Overwrapped Pressure Vessel Project Team, Early Communications System Team, Globally Interconnected Advanced Networked Telepresence Videoconferencing Development Team, Implementation of Aqueous Cleaning and Verification Processes Team, Lunar Mars Life Support Test Team, NASA Aviation Logistics Command Management Information Systems Implementation Team, Orbiter Upgrade Definition Team, Phase 1 Program Team, Space Shuttle Systems Integration Performance Enhancements Certification Team, and the X-33 Development Team.

The Roundup is an official publication of the National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, and is published every other Friday by the Public Affairs Office for all space center employees. Deadline for the submission of articles is Friday, three weeks before the desired date of publication. The Roundup office is in Bldg. 2, Rm. 181. The mail code is AP3. The main Roundup telephone number is x38648, and the fax number is x45165. Electronic mail messages may be directed to kelly.o.humphries1@jsc.nasa.gov. Editor Kelly Humphries

BULK RATE
U.S. POSTAGE
PAID
WEBSTER, TX
Permit No. G27